

CLAIM LISTING

Please find below a complete listing of presently pending claims with status identifiers. This listing of claims will replace all prior versions, and listings, of claims in the application.

1-19. Cancelled.

20. (Currently Amended) [[A]] An implantable fixed tissue comprising cross-linked elastin, wherein the elastin of the implantable fixed tissue is cross-linked with a phenolic tannin cross-linking agent, the implantable fixed tissue including a residue of the phenolic tannin cross-linking agent.

21. (Currently Amended) The fixed tissue of claim [[21]] 20, further comprising cross-linked collagen, wherein the collagen is cross-linked with a glutaraldehyde cross-linking agent.

22. (Currently Amended) The fixed tissue of claim [[21]] 20, wherein the implantable fixed tissue exhibits at least about 60% less calcification over time as compared to ~~a similar a second implantable fixed tissue of the same tissue type~~ fixed with only a glutaraldehyde fixative.

23. (Currently Amended) The fixed tissue of claim 20, wherein the implantable fixed tissue comprises at least about 10% elastin by weight.

24. (Original) The fixed tissue of claim 20, wherein the phenolic tannin cross-linking agent is tannic acid.

25. (Currently Amended) The fixed tissue of claim 20, wherein the implantable fixed tissue has a temperature of thermal denaturation greater than about 70°C.

26. (Currently Amended) The fixed tissue of claim 20, wherein the implantable fixed tissue has a temperature of thermal denaturation greater than about 80°C.

27. (Currently Amended) The fixed tissue of claim 20, wherein the implantable fixed tissue exhibits less than about 20% degradation following exposure to an elastase enzyme for a period of about 48 hours.

28. (Original) The fixed tissue of claim 20, wherein the tissue is selected from the group consisting of bovine and porcine tissue.

29. (Original) The fixed tissue of claim 20, wherein the tissue is selected from the group consisting of pericardium, aortic wall, heart valve, and vena cava tissue.

30. (Withdrawn-Currently Amended) A bioprosthesis comprising:

[[a]] an implantable fixed tissue comprising elastin, wherein said elastin is cross-linked with a tannic acid phenolic tannin cross-linking agent, the implantable fixed tissue comprising the residue of the phenolic tannin cross-linking agent; and a support material attached to the implantable fixed tissue.

31. (Withdrawn-Currently Amended) The bioprosthesis of claim 30, in which the implantable fixed tissue has an elastin content of greater than about 10% by weight of the tissue.

32. (Withdrawn-Currently Amended) The bioprosthesis of claim 30, in which the implantable fixed tissue further comprises collagen, wherein said collagen is cross-linked with a glutaraldehyde cross-linking agent.

33. (Withdrawn-Currently Amended) The bioprosthesis of claim 30, wherein the implantable fixed tissue is an anisotropic tissue.

34. (Withdrawn) The bioprosthesis of claim 33, wherein the anisotropic tissue exhibits greater stiffness in a first direction and greater elasticity in a second direction.

35. (Withdrawn) The bioprosthesis of claim 30, wherein the tissue is selected from the group consisting of pericardium, aortic wall, heart valve and vena cava tissue.

36. (Withdrawn) The bioprosthesis of claim 30, wherein the tissue is porcine vena cava tissue.

37. (Withdrawn) The bioprosthesis of claim 30, wherein the support material comprises a stent.

38. (Withdrawn) The bioprosthesis of claim 30, wherein the support material comprises a suture ring.

39. (Withdrawn) The bioprosthesis of claim 30, wherein the bioprosthesis is a bioprosthetic heart valve.

40. (Withdrawn) The bioprosthesis of claim 30, wherein the bioprosthesis exhibits at least about 60% less calcification over time as compared to a similar second

bioprosthesis comprising a fixed tissue of the same tissue type in which the fixed tissue of the second bioprosthesis is fixed with only glutaraldehyde.

41-46. Cancelled.

47. (New) The bioprosthesis of claim 30, wherein the phenolic tannin cross-linking agent is tannic acid.